Armed Forces College of Medicine

AFCM

Cardiopulmonary module

Clinical Integrated Cases

Pretest 2

Question 1

The endocardium of the heart is characterized by which of the following features?

A. Is continuous with the epicardium.

B. Contains Purkinje muscle fibers.

C. Forms the outer layer of the heart wall.

D. Contains branches of coronary vessels.

E. Lined by simple cuboidal epithelium.

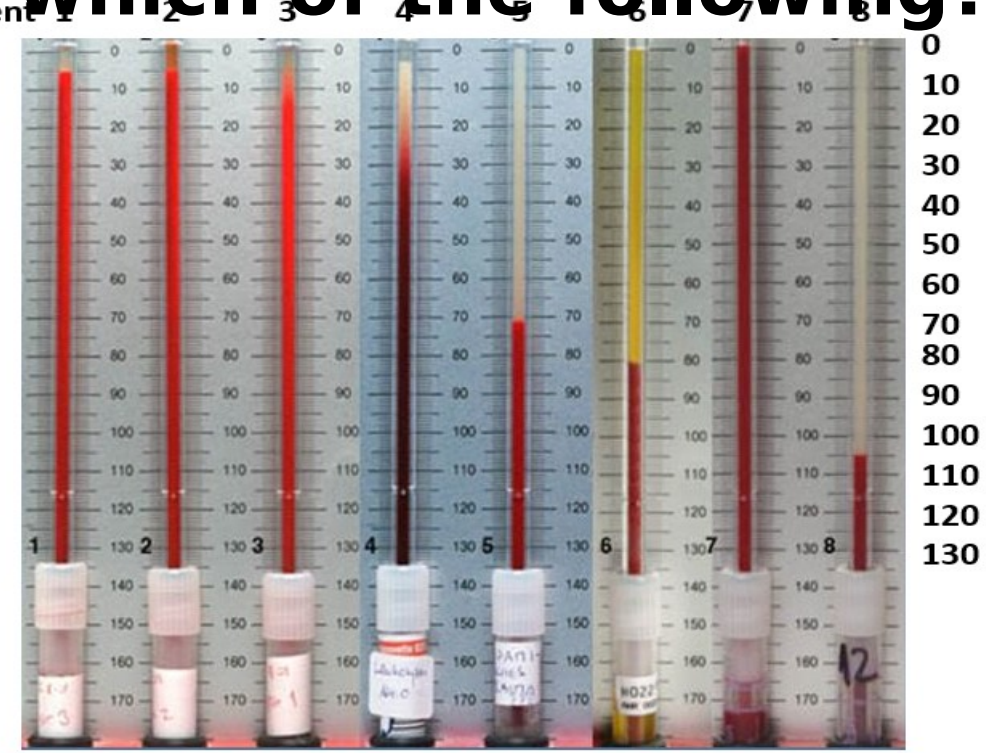
Question 2

A 29-year-old woman comes to the physician because of a 2-week history of fever and chills. Physical examination shows small, nontender nodular erythematous hemorrhages on the palms and soles of the feet. She also has tender hemorrhage on the fingertips. When questioned, she says that as a child, she had a protracted episode of pharyngitis accompanied by joint pain, rashes, and fever. Which of the following is the most likely diagnosis?

- ○ A. Acute bacterial endocarditis
- ○ B. Acute rheumatic fever
- ○ C. Polyarteritis nodosa
- ○ D. Subacute bacterial endocarditis
- ○ E. Systemic lupus erythematosus

Question 3

The following figure shown ESR of multiple female patients after 1st hour, the result of patient number 8 is considered suspicious for which of the following?



a. Anemia.
b. Mild inflammation.
c. Afibrinogenemia.
d. Malignancy.
e. Hypogammaglobulinemia.

Question 4

Which of the following increases ESR in a case of infective endocarditis?

a.Polycythemia.
b.Anemia.
c.Decreased fibrinogen.
d.Decreased Albumin level.
e.Increased Immunoglobulins.

Question 5

Which of the following bacteria could be the cause of sub-acute bacterial endocarditis?

a) Staphylococcus aureus.

b)Staphylococcus saprophyticus.

c)Streptococcus viridians.

d)Streptococcus pyogenes.

e) Klebsiella pneumoniae

Question 6

Which of the following bacteria is an important cause of bacterial endocarditis in patients with prosthetic heart valves?

a)Staphylococcus epidermides.

b)Staphylococcus saprophyticus.

c)E. coli.

d)Streptococcus pyogenes.

e)Klebsiella pneumoniae

Question 7

A 22- year- old woman presented to the physician with fever and shortness of breath. She said that she visited the dentist for tooth extraction 10 days ago. Physical examination revealed osler nodules and splenomegaly. Which of the following is the most likely predisposing factor for her condition?

a)Acute heart failure
b)Congenital heart disease
c)Systemic hypertension
d)Pulmonary tuberculosis
e)Myocardial infarction

Question 8

A 35-year-old woman presented to the hospital complaining of fever, shortness of breath and hemorrhages under her finger nails for the past week. She had a history of rheumatic fever in her childhood and extraction of a decayed tooth two weeks before presenting to the hospital. Physical examination revealed splenomegaly. Which of the following pathological features is most likely seen in her kidney?

a)Pyemic abscesses
b)Healed infarction
c)Renal stones

Question 9

The following cardiac condition is a risk factor for development of infective endocarditis:

A) Physiological mild tricuspid regurgitation
B) Mild pulmonary regurgitation
C) Mild degree of mitral valve prolapse
D) Ventricular septal defect
E) Congenital absence of the pericardium

Question 10

The most crucial medication in the treatment of infective endocarditis is:

A) Antipyretic
B) Analgesic
C) Antibiotic
D) Antioedematous
E) Antidiabetic

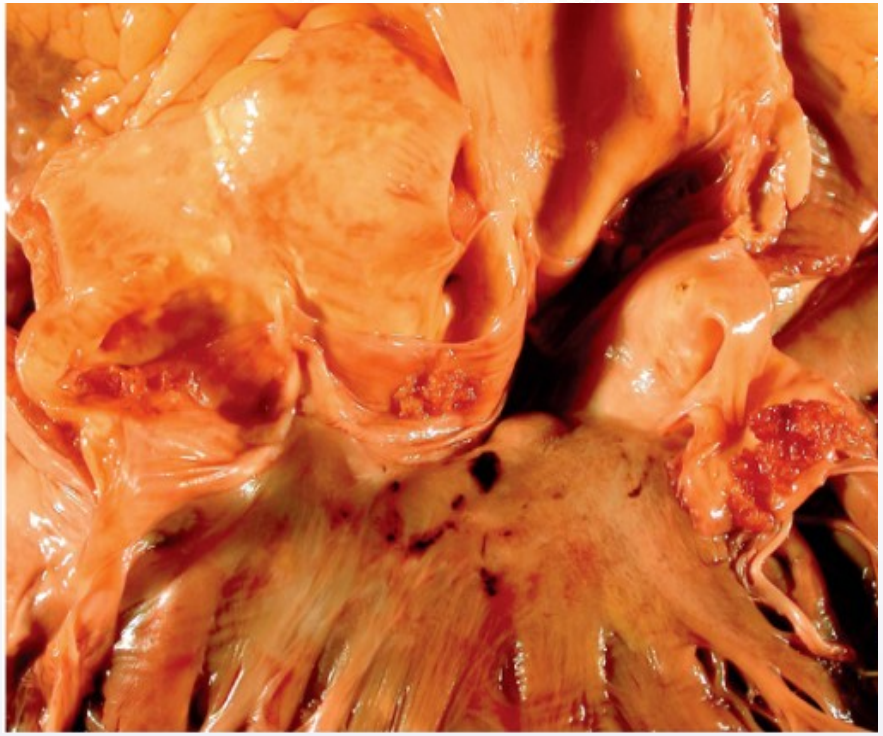
Question 11

A 25-year-old man is brought to the emergency department because of a 2-day history of high fever and shaking chills. He also reports fatigue and shortness of breath. He has been to the emergency room before and has a history of intravenous drug use, but a test for anti-HIV antibodies is negative. His temperature is 39°C (102.2°F), pulse is 80/min, respirations are 16/min, and blood pressure is 124/76 mm Hg. Physical examination shows mild jugular venous distension and a new holosystolic murmur best heard at the left lower sternal border without radiation to the axilla. The patient has no prior history of cardiac disease or surgery. Which of the following microorganisms will most likely be isolated from this patient's blood cultures?

- A. *Candida albicans*
- B. *Staphylococcus aureus*
- C. *Staphylococcus epidermidis*
- D. *Streptococcus bovis*
- E. Viridans (alpha-hemolytic) streptococci

Question 12

A 30-year-old woman is admitted to the hospital because of malaise and chills for 3 days. Her past medical history is significant for chronic hepatitis B. She has a history of IV drug use. Her temperature is 39.4°C (103°F). Physical examination shows a systolic murmur. She develops worsening respiratory distress and dies. A photograph of the cardiac valves at autopsy is shown. Which of the following is the patient's most likely underlying condition?



- A. Acute infective endocarditis
- B. Carcinoid heart disease
- C. Libman-Sacks endocarditis
- D. Nonbacterial thrombotic endocarditis
- E. Q fever endocarditis

Thank
you